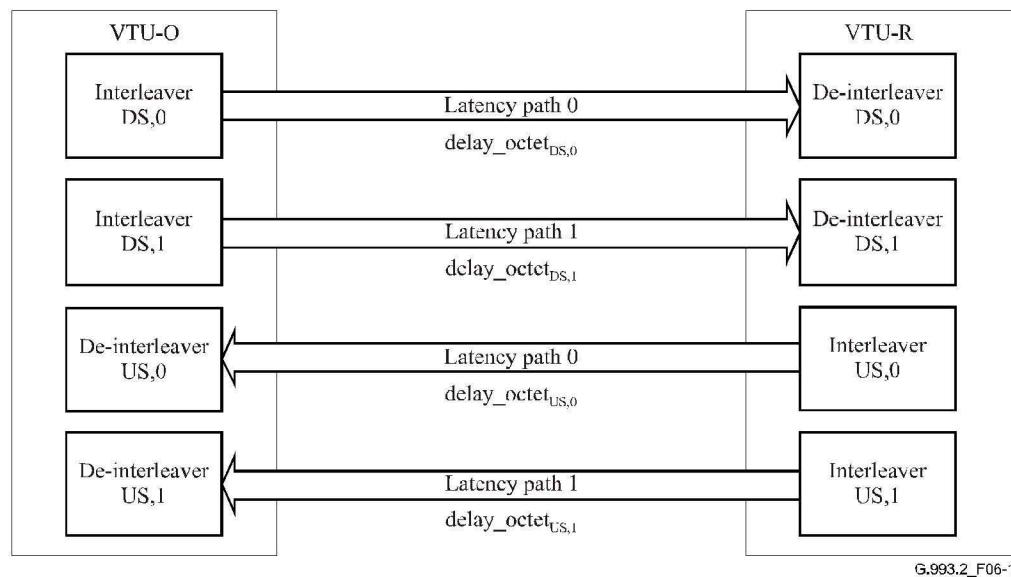# EXHIBIT E

Figure 6-1 – Illustration of all latency paths composing the aggregate interleaver and de-interleaver delay specified in each profile

The end-to-end delay in octets for the interleaver and de-interleaver pair on path p, with $p = 0$, 1, is given by:

$$\text{delay\_octet}_{x,p} = (I_{x,p} - 1) \times (D_{x,p} - 1)$$

where the direction of transmission x is either "DS" for downstream or "US" for upstream, $I_{x,p}$ is the interleaver block length, and $D_{x,p}$ is the interleaver depth.

Each interleaver and each de-interleaver for each latency path requires at least $(\text{delay\_octet}_{x,p}/2)$ octets of memory to meet this delay. The actual amount of memory used is implementation specific.

Referring to Figure 6-1, the aggregate interleaver and de-interleaver delay is specified as the sum $\text{delay\_octet}_{DS,0} + \text{delay\_octet}_{DS,1} + \text{delay\_octet}_{US,0} + \text{delay\_octet}_{US,1}$,

which can be rewritten as:

$$\sum_{p} (I_{US,p} - 1) \cdot (D_{US,p} - 1) + (I_{DS,p} - 1) \cdot (D_{DS,p} - 1)$$

VTUs shall comply with the requirement

$$\sum_{p} (I_{US,p} - 1) \cdot (D_{US,p} - 1) + (I_{DS,p} - 1) \cdot (D_{DS,p} - 1) \leq \text{MAXDELAYOCTET}$$

where the summation is over all latency paths and MAXDELAYOCTET is the parameter "aggregate interleaver and de-interleaver delay", in octets, specified in Table 6-1 for the profile.

The minimum amount of memory required in a transceiver (VTU-O or VTU-R) to meet this requirement is $\dfrac{\text{MAXDELAYOCTET}}{2}$ octets. The actual amount of memory used is implementation specific.

6.2.9   Index of the highest supported downstream data-bearing subcarrier

The index of the highest supported downstream data-bearing subcarrier is a band plan dependent parameter. It specifies the index of the highest-frequency subcarrier available for downstream transmission. A VTU-O compliant with a profile shall be capable of transmitting data-bearing